DIRECTIVE NO.	810-PG-8072.1.2B	**APPROVED BY Signature:**	*Original Signed By*
EFFECTIVE DATE:	April 26, 2001	**NAME:**	Bobby J. Flowers
EXPIRATION DATE:	April 26, 2006	**TITLE:**	Chief, Sounding Rockets Program Office

Responsible Office: 810/Sounding Rockets Program Office

Title: NSROC Performance Task Order (PTO) Process

PREFACE

P1. PURPOSE

This instruction describes the process established by the Sounding Rockets Program Office (SRPO) for accessing general engineering and technical support from the NASA Sounding Rocket Operations Contract (NSROC).

P2. REFERENCES

a. GPG 8072.1, Process Control

b. 810-PG-5100.1.1, Management of the NASA Sounding RocketsOperations Contract (NSROC)

c 810-PG-5100.1.2, SRPO Supplier Performance Evaluation

d. 810-PG-8072.1.1 Sounding Rockets Program Office Grant Management Process

e. 810-PG-1310.1.1, Sounding Rockets Program Office Process for Establishing Customer Requirements

f. NSROC Contract - NASA Sounding Rocket Operations Contract, contract number NAS5-98020

g. NSROC PTO Form - NSROC Performance Task Order Assignment Document

P3. SCOPE

This procedure applies to the SRPO process used to identify, consider and authorize establishment of customer requirements for general engineering and technical support through the NSROC Performance Task Order (PTO) process. The PTO process provides a mechanism to allow SRPO assets and resources to be utilized to support the Suborbital and Special Orbital Projects Directorate; Applied Engineering and Technology Directorate; GSFC Systems Technology and Advanced Concepts Directorate (STAAC); the GSFC Policy and Business Relations Office for other NASA Centers, other government agencies, educational entities, and commercial organizations; and other GSFC Directorates as requested.

P4. DEFINITIONS

a. Customer - Any organization or person who will receive a product or service from the Sounding Rockets Program Office.

b. General PTO - A type of Performance Task Order written to give generally defined support to a particular customer for an extended period. The process for establishing a PTO and a General PTO is the same. Work orders (WO) restricted to less than $2,500 (per job) are used to initiate individual tasks under the General PTO.

c. NSROC - Contract for the implementation of NASA's Sounding Rockets Program and for the provision of Engineering and Technical Support for other programs and projects. Contract number NAS5-98020

d. Performance Task Order (PTO) - Work performed on an individual basis typically requiring expertise similar to that necessary for implementation of the Sounding Rockets Program. PTO work can include the following: general mechanical, structural, electrical, and electronic fabrication and assembly support; general environmental testing and flight qualification support; general engineering support; engineering studies and system and subsystem development; environmental studies and support; general drafting and technical support and educational outreach activities.

e. Work Order - An individual task assignment issued to the NSROC Contractor under a General PTO for a specific task costing less than $2,500.

P5. AUTHORITIES AND RESPONSIBILITIES

N/A

P6. CANCELLATION

810-PG-8072.1.2A, NSROC Performance Task Order (PTO) Process

P7. QUALITY RECORDS

The Wallops Procurement Office maintains all original PTO documentation including the PTO Form, Cost Estimate, Purchase Request or other funding authorization, other attachments and addendum as applicable, and the PTO Closeout Report. These records are maintained in accordance with the Wallops Procurement Office procedures. The NSROC Contracting Officer's Technical Representative (COTR), who is a member of the Sounding Rockets Program Office, may utilize working copies of PTO related documents for reference purposes, but determines they are the current versions prior to use.

IMPLEMENTATION

The Sounding Rockets Program Office may receive a Performance Task Order (PTO) through GSFC STAAC; the GSFC Policy and External Relations Office for other NASA Centers, other government agencies, educational entities and commercial organizations on a cost-reimbursable basis; or directly from other GSFC Directorates.

1.0 Process Initiation

The customer initiates the PTO process for a General PTO or a PTO for a specific requirement by completing blocks 1,2, 4 through 14, 16, and 19 of the NSROC PTO Form (Form). A copy of the Form is available at http://www.wff.nasa.gov/docs/pto.doc and instructions are included.

1.1 The customer determines the complexity level of the PTO (block 12). Complexity Levels are assigned in order to provide the NSROC Contractor with appropriate guidance during actual PTO execution for balancing the relative merits of technical performance, cost, and schedule performance. The following table shows the weighting of PTO performance objectives for the various complexity levels.

PTO LEVEL	TECHNICAL PERFORMANCE	COST	SCHEDULE
1	60%	20%	20%
2	60%	30%	10%
3	20%	40%	40%
4	TBD	20% min.	TBD

Level 1: Tasks of this nature are technically complex and non-routine. The non-routine nature of these tasks may increase the technical risk associated with proper functional performance of the final product. Items falling under this category could include complex dynamical analysis, fabrication, or testing of spacecraft or the fabrication of a highly specialized mechanical component for a satellite. In these cases, meeting the defined schedule is as important as controlling costs, but high technical performance is most important.

Level 2: Tasks of this nature are also technically complex and maybe even non-routine. They may involve the analysis, fabrication or testing complex components for low priority test projects or short duration, complex engineering analyses where completion by a specific schedule is not of high value to the government.

Level 3: Tasks that fall under this category may include routine engineering or technical support which could include continuous fabrication of relatively simple mechanical parts or performance of relatively routine testing or engineering analyses. In such a case, the ability to produce a large volume of uncomplicated parts at a low cost and on-time is important.

Level 4: The relative weighting of cost, schedule, and performance is not described by categories 1 through 3 due to the unique nature of the effort, and the weighting will be identified by mutual agreement in the actual PTO development process.

1.2 The customer determines the performance Standards and Metrics (block 13) for the PTO. These Standards and Metrics will be utilized to evaluate the performance of the NSROC Contractor when the PTO is completed. Examples of Standards and Metrics are provided in the following table.

EXAMPLE STANDARDS AND METRICS	
METRIC	**STANDARD**
Cost	This is determined by the over/under share ratios. No separate cost metric is allowed.
Schedule	Number of days behind target schedule multiplied by % penalty per day of schedule fee. In the case of a General PTO, an example may be: All WOs are completed within **X** hours/days of their issuance.
Technical (Fabrication)	The drawing is reviewed for economic manufacture before fabrication is begun, corrected with customer input if necessary, and fabrication is in accordance with the drawing
Technical (Accuracy of Data)	Number/severity of errors or redesigns required.
Insight	Number of times on-line access to schedule, cost, etc. was not possible.

The NSROC COTR, or other SRPO designated representative, is available to provide assistance to the customer during the preparation of the PTO form.

1.3 The customer forwards the Form to the NSROC COTR, or designee, for review and assignment of the task number.

1.4 The NSROC COTR coordinates with the NSROC Contractor to identify the task number. The task number is entered in block 3.

2.0 Establishing Customer Requirements

Customer requirements for PTO's are established through this procedure in accordance with 810-PG-1310.1.1.

2.1 Upon receipt of the Form, the COTR reviews the complexity of the work requested to determine if a Mission Initiation Conference (MIC) and Requirements Definition Meeting (RDM) are necessary to clearly establish the customers' requirements. This determination is based on the knowledge and experience of COTR.

2.2 When a MIC and RDM are not necessary proceed to step 6.0

3.0 PTO Mission Initiation and Requirements Definition Process

The Mission Initiation Process provides a vehicle for the customer to present his requirements and specify the support necessary for a complex PTO. This first meeting is called the Mission Initiation Conference (MIC).

3.1 The SRPO contacts the customer to establish a mutually acceptable date for the MIC. Attendees include the customer and appropriate NASA supervisory, procurement, and engineering personnel along with NSROC supervisory, engineering, and technical personnel. This first meeting is very important because it provides the basis from which all requirements for the PTO are established.

3.2 The SRPO notifies the NSROC Contractor of the new PTO and provides engineering, technical, and contact information to enable informal coordination between the customer and the NSROC Contractor prior to the MIC.

4.0 Data Package

The customer is required to present a detailed data package at the MIC outlining the fabrication, assembly, testing, engineering, and technical support required for the PTO.

4.1 At the close of the MIC, the NSROC Contractor proceeds with preparation for the RDM in accordance with the NSROC contract.

5.0 Requirements Definition Meeting

Within a period of 45 calendar days after the MIC, the NSROC contractor initiates and conducts a Requirements Definition Meeting (RDM) including representatives from NASA and the customer. In the period between the MIC and RDM, the NSROC contractor develops concepts for implementation and criteria for measuring the successful execution of the PTO. The results of this mission defining process are presented at the RDM. The NSROC contractor documents the RDM in the Requirements Definition Meeting Memorandum (RDMM), which is provided to the customer within five working days of the RDM. This serves as the contractor's task plan and documents the PTO's technical requirements, the approach to satisfying those requirements, schedule, and cost information.

5.1 The customer reviews the RDMM and negotiates any issues with the NSROC Contractor as necessary.

5.2 The RDMM becomes an attachment or addendum to the PTO Form.

5.3 After resolution of all issues, the initiator (customer) indicates acceptance of the RDMM and PTO requirements by signing block 16 of the Form.

5.4 Proceed to Step 6.6

6.0 MIC and RDM not Required

When a MIC and RDM are not required (simple PTO) as determined in Step 2.2, the Form is routed directly to the NSROC Contractor for price and delivery information (Cost Quote).

6.1 Through discussions with the NSROC Contractor, a determination is made for an appropriate turn around time for the Cost Quote, if less than 45 calendar days.

6.2 Initiating requests for any required additional definition and clarification of customer requirements is the responsibility of the NSROC Contractor.

6.3 The MIC/RDM process may be initiated by request of either the customer or the NSROC Contractor if determined to be necessary.

6.4 The NSROC Contractor returns the Cost Quote, with any clarification of customer requirements in writing, to the initiator (customer) for review.

6.5 The initiator (customer) indicates acceptance of cost, schedule, and technical approach by signing block 16 of the Form.

6.6 The initiator (customer) completes a purchase request, or otherwise provides funding for the NSROC in an amount equal to the target cost plus target fee of the PTO. (Incremental funding of the total cost is acceptable for long term or high dollar value PTOs.)

6.7 The complete package including the Form, Cost Quote, purchase request, or other funding authorization, and attachments or addendum is forwarded to the COTR.

7.0 Issue Performance Task Order

7.1 The COTR coordinates internal SRPO signatures in blocks 17 and 20 of the Form.

7.2 The COTR forwards the PTO package to the NSROC Contracting Officer.

7.3 The NSROC Contracting Officer reviews the PTO package for compliance with Wallops Procurement Office requirements.

7.4 The NSROC Contracting Officer signs block 21 of the Form and issues the PTO (or General PTO as applicable) to the NSROC Contractor.

7.5 The NSROC Contractor acknowledges receipt of the PTO by providing written notification (i.e. E-mail) to the Contracting Officer.

8.0 General PTO and Work Orders

Authorized individuals may issue Work Orders to the NSROC Contractor to initiate tasks under a General PTO. The General PTO shall designate who is authorized to issue Work Orders, the type of support authorized, and the period of performance. Such Work Orders shall be restricted to tasks with estimated costs of less than $2,500 each.

9.0 PTO Evaluation

9.1 The initiator of the PTO (customer) is responsible for establishing Standards and Metrics and evaluating the performance of the NSROC Contractor. The NSROC Contractor is responsible for generating and providing the customer with a PTO Closeout Report form at the time of PTO or Work Order delivery. The purpose of the PTO Closeout Report is to document the customer's evaluation of the NSROC Contractor's technical and schedule performance on the specific deliverable.

9.2 The PTO Closeout Report measures schedule, technical, and cost performance. Schedule performance is based on a comparison of the due date as established when the PTO was initiated to the actual date complete and the delivery variance. This information is used to calculate percent of schedule (early or late). For the purposes of schedule performance evaluation, the start date for the PTO is defined as three days after issuance of the PTO by the Contracting Officer. Technical performance is based on the Standards and Metrics as established by the Customer in block 13 of the PTO Form when the PTO was initiated. Cost performance is based on a comparison of the Actual Cost of the PTO to the Target Cost as established when the PTO was initiated.

9.3 The initiator (customer) completes the PTO Closeout Report and returns it to the NSROC Contractor Business Manager within seven working days.

9.4 The NSROC Contractor submits the completed PTO Closeout Report to NASA in accordance with Section 6.2 of Attachment J-3 of the NSROC.

10.0 Change Order Process

PTO Change Orders are executed using the NSROC PTO Form (Form) and may be initiated by any party directly involved in the PTO.

10.1 The initiator of the Change Order fills out a description of the change in the appropriate box of the Form.

10.2 The original PTO number and revision number are noted in box 3 of the Form.

10.3 Return to Step 2.1 and execute the normal PTO process for the PTO Change Order.

CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	4/9/99	Initial Release
A	02/25/00	Format change for compliance with new PG template, addition of PTO Complexity Level and Standards and Metrics instructions in 8.1, deletion of Example Metrics and Standards table in 8.28, revision of 8.29 description of performance evaluation criteria.
B	4/26/01	Update format in accordance with GPG 1410.1. Section 5.0, changed NSROC contractor provides RDMM to "the customer" rather than "NASA".